

**Amendments to the Specification:**

Replace the paragraph beginning on page 11, line 22 with the following rewritten paragraph:

--With reference to Fig 2, an image sensing device is provided with a color filter array 53. It is a common practice in the art of image sensor manufacture to place resin lenslets 51 on top of each photosite. For example, particularly when the image sensing device 10 is an interline solid state image sensing device, one such lenslet technique is described in US Patent No. 4,667,092 issued May 19, 1987 to Ishihara, which is incorporated herein by reference. Ishihara discloses a solid-state image device which includes an image storage block having a block surface and a plurality of storage elements embedded along the block surface to store an image in the form of electric charge. An overlying layer is deposited to form an array of optical lenses in correspondence to the storage elements. An intermediate layer is laid between the block surface and the overlying layer. Incident light focuses through the lenses and the intermediate layer onto the storage elements. The intermediate layer serves as an adjusting layer for adjusting the focal length of the lenslets.--

Replace the paragraph beginning on page 17, line 5 with the following rewritten paragraph:

--Fig. 7 shows a block diagram of the DREFA processor 22. The sparsely sampled high resolution digital image, which is a logarithmic image signal  $b(x,y)$  output signal  $h(x,y)$  output from the A/D converter 14, is passed to the slow pixel compensator 44. The purpose of the slow pixel compensator 44 is to compensate the image signal corresponding to slow photosites by accounting for the offset in response by  $X$  stops. Alternatively, the fast pixels can be equalized to the slow pixels by adjusting the fast pixels in the opposite direction. In the preferred embodiment, the image signal corresponding to the slow photosites are incremented by the quantity  $-cvs \log(X/100)$ , where  $cvs$  is the number of code values per stop of exposure. In the preferred embodiment, the quantity  $cvs$  is 51. Alternatively, if the image signal input to the slow pixel compensator 44 is linearly related to exposure (rather than logarithmically), then the slow pixel compensator 44 scales the image signal corresponding to the slow

photosites by a factor of  $100/X$ . Note that it is assumed that the locations of the slow photosites are known to the slow pixel compensator 44. The output of the slow pixel compensator 44 is an image signal  $i(x,y)$  that has been compensated at locations corresponding to slow photosites for the difference between the slow photosite response in relation to the fast photosite response. At the locations corresponding to fast photosites, the value of the image signal  $b(x,y)$  ~~output signal  $h(x,y)$  output from the A/D converter 14~~ is identical to the value of the image signal  $i(x,y)$  output from the slow pixel compensator 44. Note that the image signal  $i(x,y)$  is not limited to an 8 bit range. In the preferred embodiment, the value of  $i(x,y)$  ranges from 0 to 357 (i.e. 9 bits).--

Replace the paragraph beginning on page 44, line 2 with the following rewritten paragraph:

--An image capture system ~~for generating and storing an~~ includes a ~~sparsely sampled~~ extended dynamic range digital image, ~~includes a sparsely sampled~~ ~~extended dynamic range image~~ sensing device having fast photosites ~~with a predetermined response to light exposure~~ interspersed with slow photosites ~~with a slower response to the same light exposure~~ for producing a sparsely sampled high resolution digital image having fast pixel values produced by the fast photosites and slow pixel values produced by the slow photosites; ~~a digital image~~ ~~A~~ processor that employs the slow pixel values to expand the dynamic range of the fast pixel values in the sparsely sampled high resolution digital image to form a full resolution digital image having an extended dynamic range; ~~a~~ ~~A~~ color encoder ~~for reducing~~ reduces the dynamic range of the full resolution digital image to fit within the dynamic range of a storage color space having a dynamic range less than ~~that~~ the dynamic range of the full resolution digital image to form a limited dynamic range digital image represented in the storage color space, ~~and for producing a residual image representing a difference between the full resolution digital image and the limited dynamic range digital image that can be used with the limited dynamic range digital image to reconstruct the full resolution digital image;~~ and a digital image store for storing the limited dynamic range digital image in association with the residual image.--